BOROUGH OF BASINGSTOKE.

MEDICAL OFFICER'S ANNUAL REPORT, 1909.

January, 1910.

Gentlemen,

I beg to present the Annual Report of the year ending December 31st, 1909, with regard to the Borough of Basingstoke, according to the instructions issued by the Local Government Board.

Basingstoke is situated 300ft. above the sea level and occupies two slopes, facing North and South, and the intervening valley of the river Loddon, and has a subsoil mainly of chalk, with clay in some places. The climate is bracing. The surrounding country is under cultivation and well wooded.

The chief occupations of the inhabitants are mercantile artisan and labourer, and there is no particular occupation detrimental to health.

The house accommodation is ample, especially for the working classes, and the newer houses are well lighted and well drained, the majority of them having a small plot of ground at the rear. As stated in my previous report there are a number of old houses that require structural alteration, they are badly ventilated, insufficiently lighted and are damp.

The plans of all buildings to be erected are submitted to the Board for approval.

WATER SUPPLY.

The public water supply of Basingstoke which has now been extended to the boundary of Worting Town End, is obtained from a well 70ft. deep, sunk at a site at West Ham, about a mile to the West of the town and is amply sufficient for all requirements. The analytical report is: that it is a typical chalk-water, the purest that can be obtained. The site of the well obviates any risk of pollution from the town. The favourable site of the well and the purity of the water may induce forgetfulness of the fact that the risk of contamination, though exceedingly small, is quite within the bounds of possibility; it is advisable, therefore, to have the purity of the water tested from time to time, say, once in six months.

THE MILK SUPPLY.

The investigations for determining the presence or absence of tubercle in the public milk supply were concluded in the early part of the year and proved to be highly satisfactory, for not in one of the specimens obtained for analysis was the presence of tubercle demonstrated. The procedure was as follows:

A pint of milk was taken from each dairyman in a sterilized bottle, hermetically sealed, labelled and dispatched to the Royal Institute of Public Health for examination. There the milk was submitted first to microscopical examination and then a further test made by inoculation experiment, but as stated, in none of the specimens examined, was the presence of tubercle demonstrated.

The report stated that the majority of the samples contained numerous other organisms, due to extraneous contamination with manure, dust, hairs, etc., and therefore could not be called "clean milk," but it went to show that the milk was obtained from healthy cows, or at least from cows having healthy udders. This percentage of extraneous contamination could with great advantage to everybody be lowered appreciably by more careful attention to cleanliness in milking and having cleaner sheds, without any

additional cost to the dairyman or cow-keeper, but the satisfactory result of this investigation of the milk supply could not but be gratifying and should be a source of comfort to those who fear infection from tubercle through drinking raw milk. A practical demonstration of the correctness of this investigation is given by the absence of deaths from abdominal tuberculosis in young children.

I again wish to thank the Health Committee for making this important investigation possible. The very few deaths from intestinal affections in young children speaks well for the comparative wholesomeness of the milk supply. but it must not be forgotten that the absence of hot weather last year was very much in favour of this favourable issue, because it is in hot weather that the harmful germs flourish which give rise to " summer diarrhoea " among infants, and therefore it is always of the utmost importance, more partiularly in hot weather, to keep milk not in the living room as is usually done among the working classes, but in a cool, well ventilated place, and always to sterilize it by bringing it to the boil shortly before giving it to infants.

DAIRIES, MILKSHOPS, COWSHEDS.

I can only repeat, from my visits to the dairies, milkshops and cowsheds in the Borough, the observations of my previous report. The dairies with the exception of two, where fault was found with the condition of the floors and walls, are tidy and cleanly kept and the water supply both hot and cold is in most cases pure and ample, and the utensils and cans appear to be clean and well kept.

It was pleasing to notice that in two or three dairies attention is being paid to the proper straining of the milk by the use of the " Ulax " Strainer ; instead of the very primitive and inefficient piece of muslin, which after being washed once or twice allows very large pieces of extraneous matter to pass through its meshes. This is an advance upon last year where there was no " Ulax " Strainers in use at all, and I trust that by the end of this year their use will be the rule and not the exception.

There still seems to be some doubt on the part of those who milk the cows whether the teats should always be washed or not—or only if they appear to be dirty. It should be an unalterable rule of routine practise to well wash the teats of each cow each time before milking, as well as to keep the hands scrupulously clean. Unfortunately, the " Milk and Dairies Bill," proposed by the late Government, and which embodied rules and regulations for the improvement of the milk supply never passed into law before dissolution of Parliament ; it is very much to be hoped that whatever party comes into power will find time to deal with this important question.

The cowsheds are far from being perfect in every detail. Abundant light, good ventilation and proper drainage are the necessary requirements of a good cowshed and without these three essentials, neither can the cows be kept healthy in winter, nor can milk be kept clean. The structure and build of the sheds in use mostly date back to a period when anything was considered good enough wherein to keep cows and to milk them, and although structural alterations had to be made in accordance with the Act, they do not yet provide sufficient light, proper ventilation and drainage as could be desired.

UNSOUND FOOD AND FOOD INSPECTION—SLAUGHTER-HOUSES.

In July meat offered for sale in the Market Place was seized by the Sanitary Officer as unfit for the food of man, and was brought to me for inspection. I had no hesitation in condemning it as unfit for human consumption, as to me it appeared dark in colour, sticky and oedematous and gave instructions for it to be taken to a magistrate by whom it was condemned and ordered to be destroyed. The salesman's advocate, however, successfully upheld the plea that the meat was white, not sticky, not oedematious and fit for the food of man, and the presiding Magistrate decided against the action taken by your M.O.H. and Sanitary Inspector. " Truly inscrutable are the divine ways of Providence."

SLAUGHTER HOUSES.

There are 12 slaughter houses on the registrar. These are visited weekly on Thursday afternoon, the usual slaughtering day, with occasional visits on other days in the week. The Inspector has the certifieate of the Royal Sanitary Institute, but has no speeial certificate in meat inspection. No tubereulous meat has been seized during the past year. The animals purchased by the butchers in the open market being of the highest quality are seldom found to be diseased, but when, as sometimes happened, an animal presenting a healthy appearance when alive is found on slaughtering to be diseased, sueh carcase is readily surrendered.

The condition of the slaughtering houses remains the same as reported last year. I again repeat that the structure in the majority of them, espeeially in the older ones is faulty and their close proxmity to dwelling houses is undesirable; but, as they are praetieally without exception, kept remarkably clean and free from obnoxious smells, they do not in any way come under the heading of a nuisanee; though might easily become so without proper care and attention to cleanliness.

In one or two instances it was observed that sheep were kept in the slaughter shed whilst others were being killed. I was informed, on remonstrating against what was eonsidered such callous indifferenee to the feelings of the animals, that "the animals had no sueh feelings." Whether that be so or not is a very debatable point, and I venture to think that from a humane point of view, it would be nicer to give the animals the benefit of the doubt and not to bring them into the slaughtering shed until immediately required for the purpose. The same is to be stated of the lairs and fasting pens for cattle in eonnection with the slaughter houses. Attention to cleanliness was observed in the greater number of places visited.

I could not help being impressed after my visits by the fact that, here was an instance, where an uncleanly procedure, such as the slaughtering of bullocks, sheep and pigs was carried on surrounded by dwelling houses, but was prevented by eleanliness and care from beeoming a source of annoyance. I, therefore, do not consider the erection of a publie abattoir a matter of urgent neeessity; yet, no doubt, at some future date, it will become desirable if not necessary.

SEWAGE AND DRAINAGE.

Enquiries having been made by the Local Government Board as to what steps had been taken for the conversion of privies into the water earriage system. I would call your attention to the fact that the Publie Healths Act Amendment Act, 1907, whieh eame into foree in January, 1908, has not yet been adopted in this Borough.

Parts III., IV. and V. of this Act chiefly affeets this Borough, as they concern sanitary provisions, infectious diseases and lodging houses, and contain important additions to the Publie Healths' Aet, 1875-1907. The adoption of the Amendment Aet, 1907, is submitted to your Committee for consideration during the coming year.

There are 2,494 water closets, 2 earth closets, 41 pail closets and 38 privy middens in use in the Borough, and when in any way possible, the eonversion of privies to the water earriage system is earried out.

It is not possible in those cases, in which the drainage is too far away to be connected up as in Goat Lane, Cranborne Lane, and the Wharf, where the privy middens in use are more than 100ft. away from the sewer—likewise at Southlea, Kingsclere Road, Sherborne Road and some parts of Worting.

The drainage system and water supply has now been carried to the farthest boundary in Worting, enabling the unsatisfactory eondition of the privies and cesspools to be done away with. The sewage and

drainage is sufficient in all parts of the district and in good working order; excremental disposal is by closet to which water is laid on.

Removal and disposal of house refuse is by public scavenger, who collects twice a week. Uncovered wooden boxes. in which house refuse is collected and placed on the side walk are still in many instances in use, but zinc portable dust bins are now more in general use than last year.

There are no nuisances remaining unabated.

Complaints have been received about the evil smelling manure carts which during the day, carry manure from the railway to the Winchester Road. These carts are stated to be a source of great annoyance to passers-by.

No stream or river is being polluted.

A report was submitted to your Committee by the M.O.H. calling attention to the inability of the dust destructor to consume effectively the greater part of the refuse collected and most of which, the destructor being unable to deal with it in the slightest, had to be collected in a large heap in the townyard until removed. This condition became intolerable in warm weather, for, besides giving rise to a bad smell, the heap became the breeding-ground for myriads of flies and assisted largely in the increase of the plague of these winged carriers of infection.

Your Committee at once resolved that an efficient dust destructor be installed in the place of the old one and steps have already been taken to carry the resolution into effect.

The lodging house has been regularly inspected and is kept in a very satisfactory condition.

The public and elementary schools are well ventilated and clean, and are in a good sanitary condition. The closets and urinals are clean and well flushed with water.

CLOSURE OF SCHOOLS.

It was considered advisable after consultation with the County Medical Officer, Dr. Lyster, to close the Elementary Schools on four occasions. The infants department Fairfields County School was closed on May 3rd to 16th on account of epidemic of measles. This closure was followed by that of Brook Street School, I.D., on account of measles and chickenpox, also on May 8th-24th; St. John's School, I.D., was closed for the same reasons from May 11-25. This department of St, John's School was again closed for a short period for the purpose of disinfection, from June 23-27. I believe this timely closure prevented a serious outbreak of diphtheria amongst the infants.

On June 9th, a case of faucial diphtheria was notified in a child aged 5 years, who attended St. John's Schools Infants' Department. On this notification followed further cases on June 15th, 21st and 25th, all occurring in the same department of the same school, so that, obviously, the infection was being spread there. It was, therefore, decided to close the infants department from Friday till Monday for the purpose of thoroughly disinfecting the rooms, forms and everything that could possibly have been handled or used by the infants. As the carrying out of this measure effectively would entail the destruction of many articles used for the purpose of instruction, such as wool, plasticinal, pencils and such like, permission was readily obtained from the School Authorities to destroy everything that could not possibly be sterilised by heat or antiseptics.

The method pursued, in what is not an easy matter, was the following:—

The school books, copy books, charts and stationery were hung on lines, spread on forms, opened and exposed for 24 hours to the fumes of sulphur and formalin; the pencils, plasticine, pointers, etc., were soaked in a 1-200 solution of Cyllin for 12 hours, which though not improving their appearance, at least,

rendered them sterile. The walls were sprayed with cyllin, and the floors, benches and forms thoroughly scrubbed with a 1-200 solution of cyllin ; the estimated cost including the price of chemicals used and articles destroyed, amounted to about £2.

On the morning of the re-opening of the School and the succeeding 5 days, the children were inspected and the throats and noses of any children having the appearance of being ill or ailing were carefully examined, swabs were taken from the throats of any doubtful ones and any child showing the slightest signs of sore throat or nasal catarrh was sent home with instructions to the parents to keep the child isolated and away for a week from School.

The Assistant County M.O. of the West Riding of Yorkshire, began his report on the control of diphtheria in schools, by stating : "There is little doubt that intercourse at school is an important factor in the spread of diphtheria. A child may become infected at school and carry the infection to other members of the family, etc." I think that one may justifiably assume that by these stringent measures of disinfection a possible outbreak of diphtheria was averted.

It would have been almost impossible to have carried out these measures without the assistance and co-operation of the head mistress in particular. and the teachers, who ably assisted in the arrangements for disinfection of the school appliances and entered into the investigation of the children with intelligence and zeal.

The spread of infection in schools, of diphtheria, scarlet fever and whooping cough could greatly be kept under by making the infants occupy always the same seats and have their own particular pencils, etc. kept in separate boxes ; by these means the promiscuous passing on of chewed pencils, etc., from one child to another would be prevented. The same precautions could also be applied to the books. Undoubtedly, the common drinking cup is a source whereby infection is sometimes spread. The practice of dry-sweeping the floors after school hours, common, I believe, in most if not all the schools, is to be condemned. The result of such sweeping is a thick cloud of dust, which desposits on the forms and desks, to be again disturbed into the atmosphere on the children trooping into the school on the following morning.

The sprinkling of wet sawdust or some other damp material would obviate this insanitary practice, though giving little extra trouble.

METHOD OF DEALING WITH INFECTIOUS DISEASES.

Any case of notifiable disease is removed, at the request of the medical attendant or parent to an isolation hospital, distant one mile and a half from the town. Hospital accommondation is stated to be ample. Disinfection by the Sanitary Inspector is carried out as soon as possible after removal of the patient to the hospital. or after convalescence of any patient nursed at home. Contrary to my calculations, scarlet fever was not markedly epidemic this year, although there were 18 cases notified ; this number compares favourably with that of last year when there were 55. Whether the climatic conditions obtaining this year were unsuitable for the spread of the disease, it is difficult to state, as it is yet not known what circumstances influence the rise or fall in the number of cases. Instead, however, of scarlet fever, we were visited by epidemics of measles, chicken-pox and whooping cough. As stated previously measles and chicken-pox were prevalent amongst the younger children, whilst it would, probably, be impossible to find a child in the town under six years of age, who has not had either recently or previously an attack of whooping-cough.

Eleven cases of diphtheria occurred of which two proved fatal.

METHODS OF CONTROL OF TUBERCULOSIS.

Your Committee decided in the early part of the year to introduce the system of voluntary

notification of cases of pthisis pulmonalis (consumption of lung) at the usual notification fee of 2/6. It was hoped by the introduction of this measure to learn, approximately, the number of consumptives in the town and their domicile, so that by means of instruction and education of the patient where required, and by disinfection where necessary, the disease could be prevented from spreading from the affected to other members of the family or community.

I regret to have to state that here, as in some other places where voluntary notification has been tried, it has not proved successful; the majority of cases have not been notified. I am convinced that it must be due to an oversight or to forgetfulness, that all medical practitioners have not availed themselves of the opportunity or shown themselves more willing to assist in, what is now recognised as an important measure, in combating tuberculosis, and I venture to suggest that it would be of service to again inform them of the introduction of voluntary notification of phthises at the usual notification fee. I am convinced that very shortly consumption will be included in the list of compulsory notifiable diseases.

There were 14 deaths from consumption this year, which means that out of every 10½ deaths occurring in Basingstoke, one is due to it. There are, probably, to make a rough but moderate estimate, 70 people suffering from consumption, in a more or less severe form, is this town.

Responsible authorities have awakened to the fact that it is possible by proper control, *i.e.* notification, education of the patient in observing a few simple precautions, and disinfecting after death, or the removal of the patient, to limit the spread of infection to others. We have had just lately two sad but striking proofs that the disease will rapidly attack other members of a family if proper precautions are not taken to prevent it doing so. I should like again to emphasize in this year's report the not appreciated fact, that consumption is catching like any other infectious disease, that defective environment is everything in the acquirement of the disease, that hereditary tendency may be but a predisposing cause, but not by any means a necessary element that, by taking proper precautions the disease can be prevented from spreading, that if they are not taken another member of the family will become infected sooner or later, that the few rules to be observed are neither irksome nor disagreeable either to patient or parent.

I beg to offer the following suggestions which I consider would be of use in combating and suppressing consumption :—

1. Voluntary notification of all cases until such time as made compulsory.
2. The undertaking of bacteriological examination of sputum free of charge in doubtful cases.
3. The immediate notification of deaths from consumption by the registrar to the M.O.H.
4. The appointment of lady visitors to visit and instruct the parents and educate the patient so that he does not become a source of infection to others.
5. The conversion of a part of the Isolation Hospital into a Sanitorium for the treatment of early and suitable cases.
6. The providing of bills, leaflets, etc., and enamelled iron plates to instruct and to caution against spitting in public places, etc.

NOTIFICATION OF BIRTHS' ACT.

At the request of the Health Committee, an interview was sought with the County Medical Officer, Dr. Lyster, for the purpose of discussing with him the advantages to be gained by the adoption of the above Act in this Borough. A report was then laid before your Committee embodying the chief points of the Act, their suitability and relation to present conditions which obtain here. Your Committee after due deliberation on the report of the M.O.H. decided that the present conditions did not warrant the introduction of the Act.

FACTORY AND WORKSHOPS' ACT.

Factories and workshops have been regularly inspected. 3,095 inspections were made during the year, 52 complaints were received and 96 nuisances abated. 8 smoke tests, 9 chemical tests, 10 water tests, and 36 disinfections were carried out.

The bakehouses were visited and inspected and found satisfactory.

A tabulated form accompanies this report.

VITAL STATISTICS DURING 1909.

These statistics are calculated per 1,000 of the estimated population taken as 11,000. The number of births registered in 1909 is 261, being three less than in 1908; males again being slighty in excess of females, thus there were 138 males and 123 females born.

It is regrettable to have to state that the birth-rate is steadily decreasing in this town, as elsewhere. In 1906 and 1907 there were born respectively 306 and 284 children, and in 1908 and 1909 264 and 261 in spite of the increasing population; the last is the lowest birth rate registered for many years.

This state of affairs, serious in itself, is rendered still more so, by the fact that, although annually there are less babies born, the ratio of the death rate of infants under one year is not smaller also; instead of improving it remains practically the same, indicating that the newly born are weaker at birth, that there is an increasing depreciation in their powers of resistance.

Thus the number of infants dying under one year is practically the same this year as in the preceding four years.

There were 23 deaths; the causes of the deaths was as follows:—

Whooping Cough claimed most victims	6
Premature Birth	4
Inanition	4
Congenital Defects	3
Marasmus	1
Pneumonia	2
Tuberculosis	1
Enteritis	1
Convulsions	1
Total	23

There were 9 illegimate births registered, 3 males and 6 females. Still births were not registered.

The number of deaths at all ages was 139 giving a death rate of 12.6, the same as last year. In 1906 we had the highest birthrate (306) and the lowest deathrate 10.8.

A tabulated form of the causes of death, etc., accompanies this report.

Your obedient Servant,

H. A. AHRENS,

Medical Officer of Health.

For the Library.

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